

DESCRIPTION

The 2HB series is an outstanding solution for high mounting height industrial or retail applications. The 2HB optic has been optimized to provide maximum performance from either the T5 or T8 lamps. Optional uplight component is provided to enable excellent ceiling uniformity.

APPLICATION

2HB's high lumen package allows the benefits of fluorescent to be applied at high mounting heights that were traditionally exclusive to H.I.D. The primary benefits include exceptional color rendering, high system efficacy, 95% lumen maintenance, long lamp life, instant on/instant re-strike, economical dimming, and uniform brightness control. Primary applications include "big box" retail, shopping malls, light industrial, etc.

SPECIFICATION FEATURES

A...Construction

Housing, end plates and socket tracks are die formed code gauge, prime cold rolled steel. The housing features an integral ballast channel that adds strength and provides numerous KO's for easy installation. Die formed internal reflectors are available in both high reflectance specular material or in painted after fabrication white enamel.

B...Electrical

Ballasts are Class "P" and are positively secured by mounting bolts. Pressure-lock lampholders. UL/CUL listed. Suitable for damp locations.

C...Finish

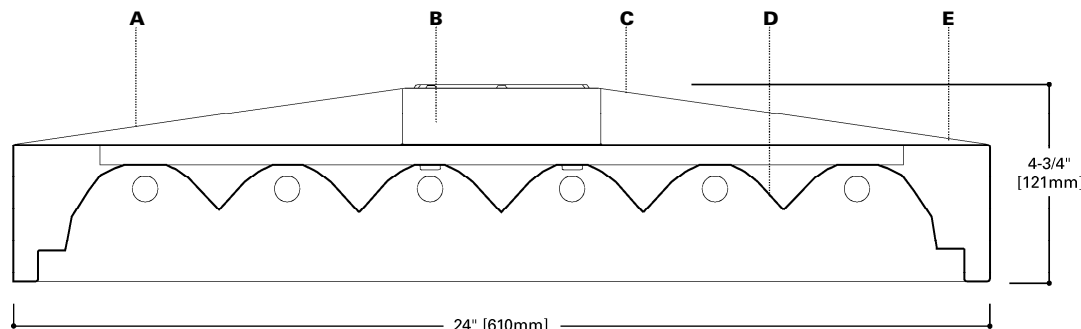
Electrostatically applied baked white enamel finish is preceded by a multistage cleaning cycle, iron phosphate coating with rust inhibitor.

D...Downlight/Uplight Optics

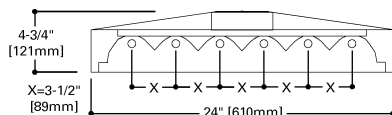
Open downlight design optimizes performance. Gasketed door frame & lens assembly is optional for more demanding environments. Uplight option provided to enable ceiling uniformity.

E...Mounting

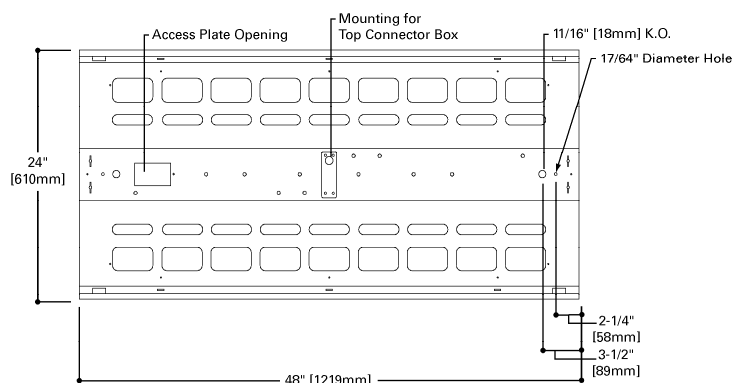
The 2HB series is ideally suited for surface, suspension mounting with optional wire hook and chain set, stem or cable mounting. Top connector box mounting is also available.



LAMP CONFIGURATIONS



DIMENSION TOP VIEW



COOPER LIGHTING

| Catalog # | | Type |
|-------------|--|------|
| Project | | |
| Comments | | Date |
| Prepared by | | |



2HB35

2' x 4' High-Bay
6 Lamp

HIGH-BAY INDUSTRIAL
LUMINAIRE



PRODUCT INCLUDES:

- 6-Lamp T5HO
- 5000K GE Lamps
- Universal Voltage ballast
- ULT Program Start Ballasts
- Up-light
- Top Connector Box Plate
- 277V 3 ft. Cord & Plug
- Motion Sensor

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps
654 = 363W

Luminaire Efficacy Rating

LER = 66 (White)

LER = 70 (Specular Inserts)

Catalog Number: 2HB-654T5-UPL

Yearly Cost of 1000 Lumens,
3000 hrs. at .08 KWH = \$3.45

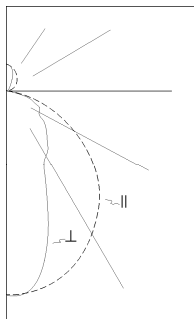
* Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements

** Consult Pre Sales Technical Support.

ADF061144-3



PHOTOMETRICS



2HB-654T5-UPL
 (2) Electronic Ballasts
 (6) F54T5/HO 830
 54W lamps
 4400 lumens
 Spacing criterion:
 (H) 1.2 x mounting
 height, (L) 0.7 x
 mounting height
 Efficiency 92.5%
 Test Report:
 2HB654T5UPL4
 LER =70
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.45

Candela

| Angle | Along H | 45° | Across L |
|-------|---------|-------|----------|
| 0 | 13320 | 13320 | 13320 |
| 5 | 13250 | 13294 | 13308 |
| 10 | 13061 | 12925 | 12351 |
| 15 | 12745 | 11840 | 10278 |
| 20 | 12299 | 10141 | 7845 |
| 25 | 11735 | 8184 | 5948 |
| 30 | 11057 | 6360 | 5033 |
| 35 | 10274 | 5024 | 4660 |
| 40 | 9396 | 4314 | 4074 |
| 45 | 8423 | 3874 | 3694 |
| 50 | 7352 | 3264 | 3175 |
| 55 | 6193 | 2829 | 2610 |
| 60 | 4991 | 2290 | 2465 |
| 65 | 3788 | 1809 | 2235 |
| 70 | 2613 | 1638 | 1576 |
| 75 | 1561 | 1098 | 687 |
| 80 | 709 | 363 | 123 |
| 85 | 138 | 32 | 12 |
| 90 | 4 | 5 | 4 |

Coefficients of Utilization

| Effective floor cavity reflectance 20% | | | | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|----|----|
| 80% | | | | 70% | | | | 50% | | | | 30% | | | |
| rc | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0% |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 108 | 108 | 108 | 108 | 105 | 105 | 105 | 105 | 98 | 98 | 98 | 93 | 93 | 93 | 85 |
| 1 | 101 | 97 | 94 | 91 | 98 | 94 | 92 | 89 | 89 | 87 | 85 | 84 | 82 | 81 | 75 |
| 2 | 93 | 87 | 82 | 77 | 90 | 84 | 80 | 76 | 80 | 76 | 73 | 76 | 73 | 70 | 65 |
| 3 | 86 | 78 | 72 | 67 | 83 | 76 | 70 | 66 | 72 | 67 | 63 | 69 | 65 | 61 | 57 |
| 4 | 80 | 70 | 63 | 58 | 77 | 69 | 62 | 57 | 65 | 60 | 56 | 62 | 58 | 54 | 51 |
| 5 | 74 | 63 | 56 | 50 | 71 | 62 | 55 | 50 | 59 | 53 | 48 | 56 | 51 | 47 | 44 |
| 6 | 68 | 57 | 50 | 45 | 66 | 56 | 49 | 44 | 54 | 48 | 43 | 51 | 46 | 42 | 39 |
| 7 | 63 | 52 | 45 | 40 | 61 | 51 | 44 | 39 | 49 | 43 | 38 | 47 | 42 | 38 | 35 |
| 8 | 59 | 47 | 40 | 35 | 57 | 46 | 40 | 35 | 45 | 39 | 34 | 43 | 37 | 34 | 31 |
| 9 | 55 | 43 | 36 | 31 | 53 | 42 | 35 | 31 | 41 | 35 | 30 | 39 | 34 | 30 | 28 |
| 10 | 51 | 39 | 33 | 28 | 49 | 39 | 32 | 28 | 37 | 31 | 27 | 36 | 31 | 27 | 25 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 8500 | 32.2 | 34.8 |
| 0-40 | 12487 | 47.3 | 51.1 |
| 0-60 | 19012 | 72.0 | 77.8 |
| 0-90 | 22353 | 84.7 | 91.5 |
| 0-180 | 24424 | 92.5 | 100.0 |

Typical VCP Percentages

| Room Size (Ft.) | Height Along | | Height Across | |
|-----------------|--------------|-------|---------------|-------|
| | 8.5' | 10.0' | 8.5' | 10.0' |
| 20 x 20 | 33 | 37 | 37 | 42 |
| 30 x 30 | 30 | 31 | 38 | 36 |
| 30 x 60 | 29 | 28 | 46 | 41 |
| 60 x 30 | 38 | 36 | 43 | 40 |
| 60 x 60 | 36 | 32 | 50 | 44 |

ORDERING INFORMATION

SAMPLE NUMBER: 2HB-654T5-277-LGF54T5M/850K-TU-B454PUNVE/B254PUNVD-UPL-TCBP-PC3-MS-U

| | | | | | | | |
|-----------------------|------------------------------|----------------------------------|--|--------------------------------|--|--|---------------------------------|
| Width 2=24" | Series HB=High Bay | No. of Lamps 6=6 Lamps | Lamp Type 54T5=T5HO GE Lamps (48"), 5000K | Voltage 277=277 Volt | Ballast =Universal Lighting Technology T5HO 4 Lamp and 2 Lamp Program Start Electronic Ballast | Additional Items UPL=Uplight Apertures TCBP=Top Connector Box Plate PC3=3' Power Cord & Plug MS=Motion Sensor | Packaging U=Unit Pack |
|-----------------------|------------------------------|----------------------------------|--|--------------------------------|--|--|---------------------------------|

NOTES: Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

| Catalog No. | Wt. |
|-------------|---------|
| 2HB35 | 27 lbs. |